

Figure 1A

Genomic nucleotide sequence of an AHAS gene from *Arabidopsis thaliana* (SEQ ID NO:1)

CTTGTATCCTTCTCTTAACCAATAAAAAAGAAAGAAAGATCAATTTGATAAATTTCTCAGC  
CACAAATTCTACATTTAGGTTTTAGCATATCGAAGGCTCAATCACAAATACAATAGATAGAC  
TAGAGATTCCAGCGTCACGTGAGTTTTATCTATAAATAAAGGACCAAAAATCAAATCCCGAG  
GGCATTTCGTAAATCCAACATAAAACCCCTTAAACTTCAAGTCTCATTTTTTAAACAAATCATG  
TTCACAAGTCTCTTCTTCTTCTCTGTTTTCTCTATCTCTTGCTCATCTTTCTCCTGAACCATG  
GCGGCGCTTACAACAACAACAACATCTTCTTCGATCTCCTTCTCCACCAAACCATCTCC  
CTCCTCTCCCAAATCACCATTACCAATCTCCAGATTCTCCCTCCCATTTCTCCCTAAACCCCA  
AGAAATCATCTCTCTCTCTCCCGCCGCGCGGTATCAAATCCAGCTCTCCCTCCTCCATCTCC  
GCCGTGCTCAACACAACCACCAATGTCAACAACCACTCCCTCTCCAACCAAACCTACCAAACC  
CGAAACATTCTCTCCCGATTCTGCTCCAGATCAACCCCGCAAAGGCGCTGATATCCTCGTCG  
AAGCTTTAGAACGTCAAGGCGTAGAAACCGTATTCGCTTACCCTGGAGGTGCATCAATGGAG  
ATTCACCAAGCCTTAACCCGCTCTTCTCAATCCGTAACGTCCTTCTCGTCACGAACAAGG  
AGGTGTATTCTGCAGCAGAAGGATACGCTCGATCCTCAGGTAAACCAGGTATCTGTATAGCCA  
CTTCAGGTCCCGGAGCTACAAATCTCGTTAGCGGATTAGCCGATGCGTTGTTAGATAGTGTT  
CCTCTTGTAGCAATCACAGGACAAGTCCCTCGTCGTATGATTGGTACAGATGCGTTTCAAGA  
GACTCCGATTGTTGAGGTAACGCGTTCTGATTACGAAGCATAACTATCTTGTGATGGATGTTG  
AAGATATCCCTAGGATTATTGAGGAAGCTTTCTTTTCTAGCTACTTCTGGTAGACCTGGACCT  
GTTTTGGTTGATGTTCTTAAAGATATTCAACAACAGCTTGCGATTCTTAATTGGGAACAGGC  
TATGAGATTACCTGGTTATATGTCTAGGATGCCTAAACCTCCGGAAGATTCTCATTTGGAGC  
AGATTGTTAGGTTGATTTCTGAGTCTAAGAAGCCTGTGTTGTATGTTGGTGGTGGTTGTTG  
AATTCTAGCGATGAATTGGGTAGGTTTGTGAGCTTACGGGGATCCCTGTTGCGAGTACGTT  
GATGGGGCTGGGATCTTATCCTTGTGATGATGAGTTGTCGTTACATATGCTTGGAAATGCATG  
GGACTGTGTATGCAAATTACGCTGTGGAGCATAGTGATTTGTTGTTGGCGTTTGGGGTAAGG  
TTTGATGATCGTGTACGGGTAAGCTTGAGGCTTTTGCTAGTAGGGCTAAGATTGTTTCATAT  
TGATATTGACTCGGCTGAGATTGGGAAGAATAAGACTCCTCATGTGTCTGTGTGTGGTGATG  
TTAAGCTGGCTTTGCAAGGGATGAATAAGGTTCTTGAGAACCGAGCGGAGGAGCTTAAGCTT  
GATTTTGGAGTTTGGAGGAATGAGTTGAACGTACAGAAACAGAAGTTTCCGTTGAGCTTTAA  
GACGTTTGGGGAAGCTATTCTCCACAGTATGCGATTAAAGGTCCTTGATGAGTTGACTGATG  
GAAAAGCCATAATAAGTACTGGTGTCTGGGCAACATCAAATGTGGGCGGCGCAGTTCTACAAT  
TACAAGAAACCAAGGCAGTGGCTATCATCAGGAGGCCTTGGAGCTATGGGATTTGGACTTCC  
TGCTGCGATTGGAGCGTCTGTTGCTAACCCTGATGCGATAGTTGTGGATATTGACGGAGATG  
GAAGCTTTATAATGAATGTGCAAGAGCTAGCCACTATTCGTGTAGAGAATCTTCCAGTGAAG  
GTACTTTTATTAAACAACCAGCATCTTGGCATGGTTATGCAATGGGAAGATCGGTTCTACAA  
AGCTAACCGAGCTCACACATTTCTCGGGGATCCGGCTCAGGAGGACGAGATATTCCCGAACA  
TGTTGCTGTTTGCAGCAGCTTGCGGGATTCCAGCGGCGAGGGTGACAAAGAAAGCAGATCTC  
CGAGAAGCTATTGAGACAATGCTGGATACACCAGGACCTTACCTGTTGGATGTGATTTGTCC  
GCACCAAGAACATGTGTTGCCGATGATCCCGAATGGTGGCACTTTCAACGATGTCATAACGG  
AAGGAGATGGCCGGATTAAATACTGAGAGATGAAACCGGTGATTATCAGAACCTTTTATGGT  
CTTTGTAT

100570901409

## Figure 1B

Coding nucleotide sequence of an AHAS gene from *Arabidopsis thaliana* (SEQ ID NO:2)

ATGGCGGCGGCAACAACAACAACAACATCTTCTTCGATCTCCTTCTCCACCAAACCATC  
TCCTTCTCCTCCAAATCACCATTACCAATCTCCAGATTCTCCCTCCCATTCTCCCTAAACC  
CCAACAAATCATCCTCCTCCTCCCGCCGCGCGGTATCAAATCCAGCTCTCCCTCCTCCATC  
TCCGCCGTGCTCAACACAACCACCAATGTCACAACCACTCCCTCTCCAACCAAACCTACCAA  
ACCCGAAACATTTCATCTCCCGATTTCGCTCCAGATCAACCCCGCAAAGGCGCTGATATCCTCG  
TCGAAGCTTTAGAACGTCAAGGCGTAGAAACCGTATTTCGCTTACCCTGGAGGTGCATCAATG  
GAGATTCACCAAGCCTTAACCCGCTCTTCCTCAATCCGTAACGTCCTTCCTCGTCACGAACA  
AGGAGGTGTATTTCGCAGCAGAAGGATACGCTCGATCCTCAGGTAAACCAGGTATCTGTATAG  
CCACTTCAGGTCCCGGAGCTACAAATCTCGTTAGCGGATTAGCCGATGCGTTGTTAGATAGT  
GTTCTCTTGTAGCAATCACAGGACAAGTCCCTCGTCGTATGATTGGTACAGATGCGTTTCA  
AGAGACTCCGATTGTTGAGGTAACGCGTTTCGATTACGAAGCATAACTATCTTGTGATGGATG  
TTGAAGATATCCCTAGGATTATTGAGGAAGCTTTCTTTTCTAGCTACTTCTGGTAGACCTGGA  
CCTGTTTTTGGTTGATGTTCTTAAAGATATTCAACAACAGCTTGCGATTCTTAATTGGGAACA  
GGCTATGAGATTACCTGGTTATATGTCTAGGATGCCTAAACCTCCGGAAGATTCTCATTTGG  
AGCAGATTGTTAGGTTGATTTCTGAGTCTAAGAAGCCTGTGTTGTATGTTGGTGGTGGTTGT  
TTGAATTCTAGCGATGAATTGGGTAGGTTTGTGAGCTTACGGGGATCCCTGTTGCGAGTAC  
GTTGATGGGGCTGGGATCTTATCCTTGTGATGATGAGTTGTCGTTACATATGCTTGGGAATGC  
ATGGGACTGTGTATGCAAATTACGCTGTGGAGCATAGTGATTTGTTGTTGGCGTTTGGGGTA  
AGGTTTGATGATCGTGTACGGGTAAGCTTGAGGCTTTTGCTAGTAGGGCTAAGATTGTTCA  
TATTGATATTGACTCGGCTGAGATTGGGAAGAATAAGACTCCTCATGTGTCTGTGTGTGGTG  
ATGTTAAGCTGGCTTTGCAAGGGATGAATAAGGTTCTTGAGAACCGAGCGGAGGAGCTTAAG  
CTTGATTTTGGAGTTTGGAGGAATGAGTTGAACGTACAGAAACAGAAGTTTCCGTTGAGCTT  
TAAGACGTTTGGGGAAGCTATTCCTCCACAGTATGCGATTAAGGTCCTTGATGAGTTGACTG  
ATGGAAAAGCCATAATAAGTACTGGTGTCTGGGCAACATCAAATGTGGGCGGCGCAGTTCTAC  
AATTACAAGAAACCAAGGCAGTGGCTATCATCAGGAGGCCTTGAGCTATGGGATTTGGACT  
TCCTGCTGCGATTGGAGCGTCTGTTGCTAACCCCTGATGCGATAGTTGTGGATATTGACGGAG  
ATGGAAGCTTTATAATGAATGTGCAAGAGCTAGCCACTATTCTGTGTAGAGAATCTTCCAGTG  
AAGGTACTTTTATTAAACAACCAGCATCTTGGCATGGTTATGCAATGGGAAGATCGGTTCTA  
CAAAGCTAACCGAGCTCACACATTTCTCGGGGATCCGGCTCAGGAGGACGAGATATTCCCGA  
ACATGTTGCTGTTTGCAGCAGCTTGCGGGATTCCAGCGGCGAGGGTGACAAAGAAAGCAGAT  
CTCCGAGAAGCTATTCAGACAATGCTGGATACACCAGGACCTTACCTGTTGGATGTGATTTG  
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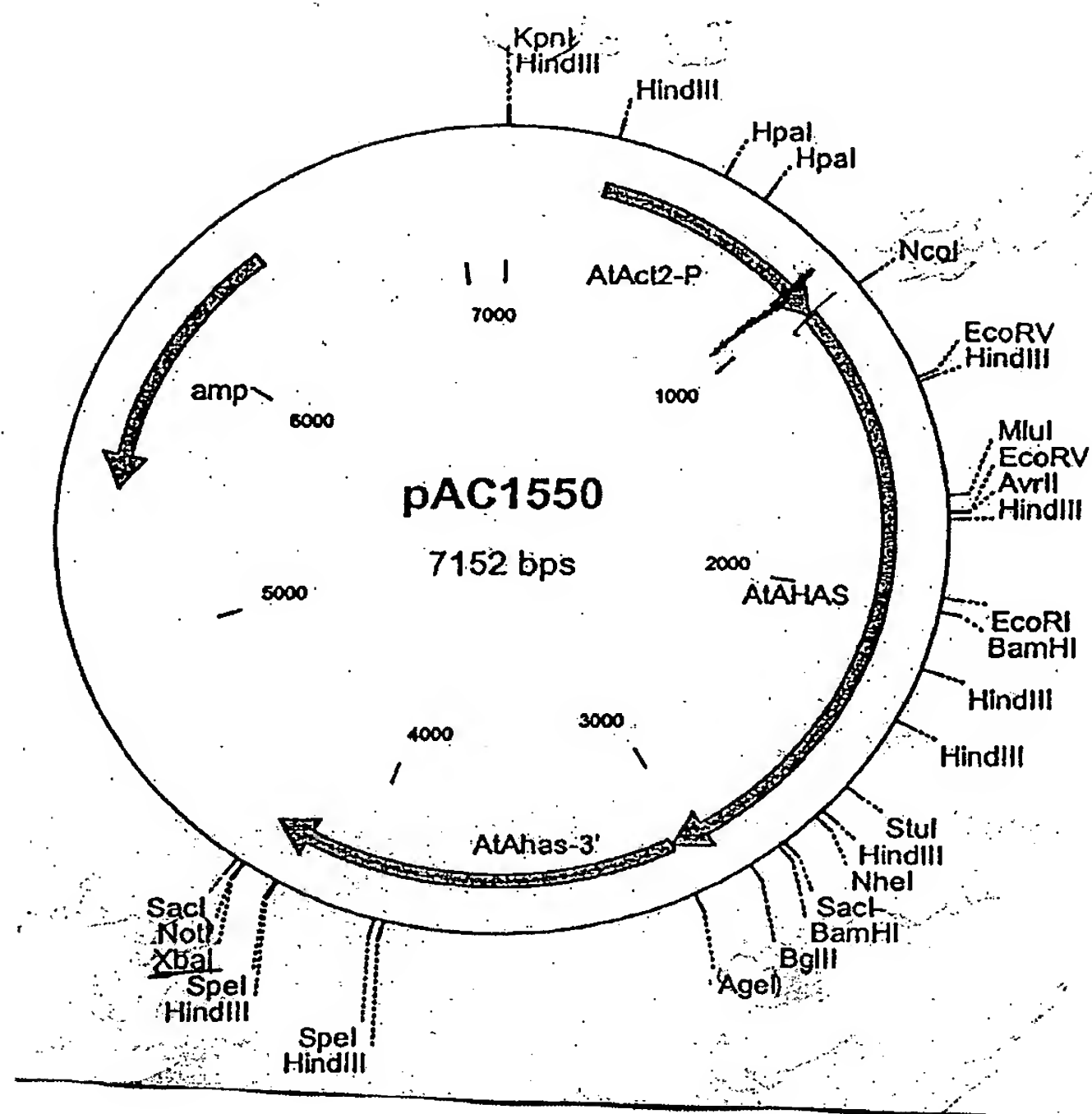
Figure 1C

Amino acid sequence of an AHAS gene from *Arabidopsis thaliana* (SEQ ID NO:3)

MAAATTTTTTSSSISFSTKPSPPSSSKSPLPISRFSLPFSLNPNKSSSSSSRRRGIKSSSPSSIS  
AVLNTTTTNVTTTPSPTKPTKPETFISRFAPDQPRKGADILVEALERQGVETVFAYPGG  
ASMEIHQALTRSSSIRNVLP RHEQGGVF AAEGYARSSGKPGICIATSGPGATNLVSGL  
ADALLDSVPLVAITGQVPRRMIGTDAFQETPIVEVTRSITKHNYLVMDVEDIPRIIEEAF  
FLATSGRPGPVLVDVPKDIQQQLAIPNWEQAMRLPGYMSRMPKPPEDSHLEQIVRLIS  
ESKKPVLYVGGGCLNSSDELGRFVELTGIPVASTLMGLGSYPCDDELSLHMLGMHGT  
VYANYAVEHSDLLLAFGVRFDDRVTGKLEAFASRAKIVHIDIDSAEIGKNKTPHVSVC  
GDVKLALQGMNKVLENRAEELKLDFGVWRNELNVQKQKFPLSFKTFGEAIPPQYAI  
KVLDELTDGKAISTGVGQHQMWA AQFYNYKKPROWLSSGGLGAMGFGLPAAIGAS  
VANPDAIVVDIDGDGSFIMNVQELATIRVENLPVKVLLNNQHLGMVMQWEDRFYK  
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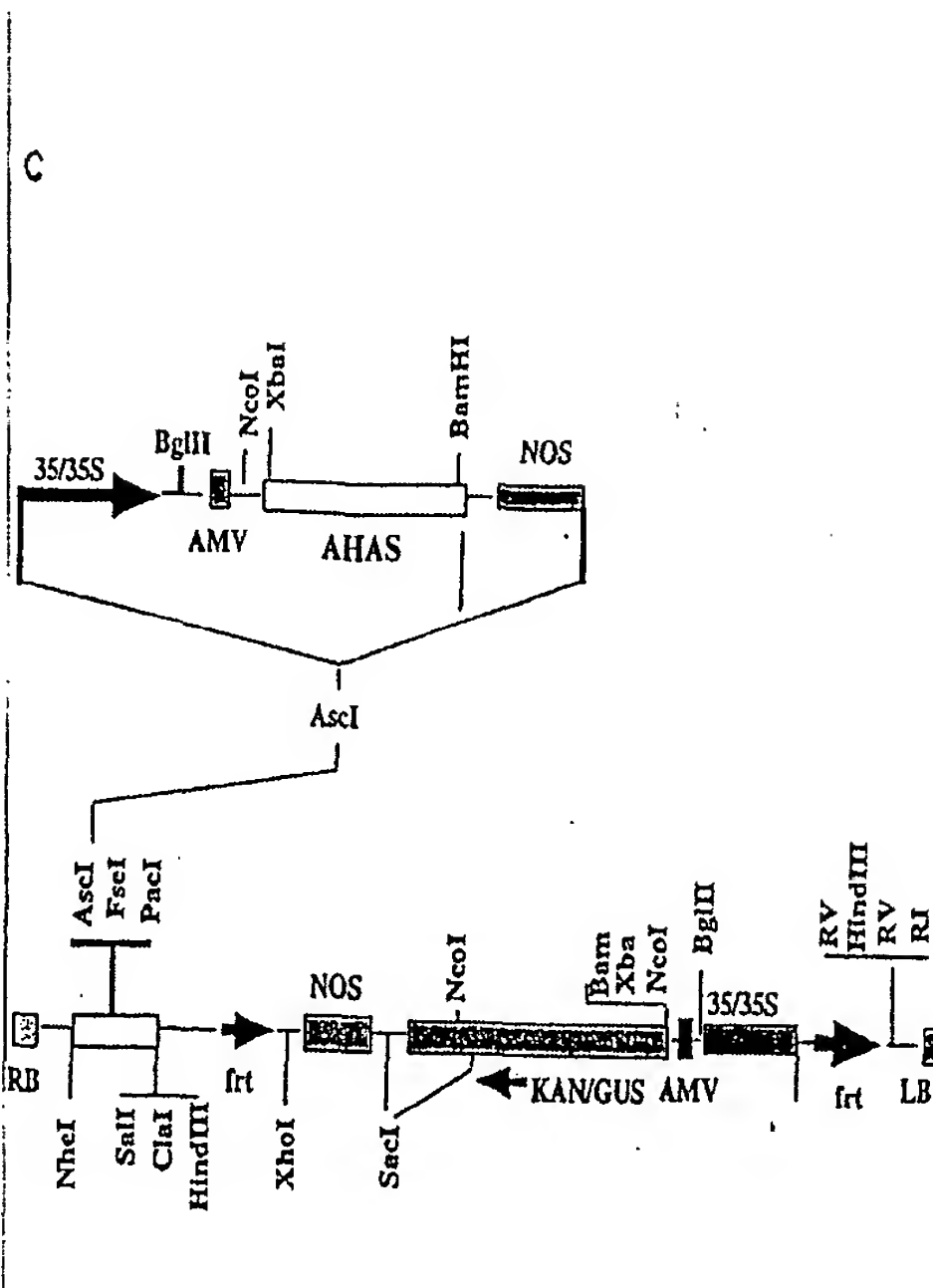
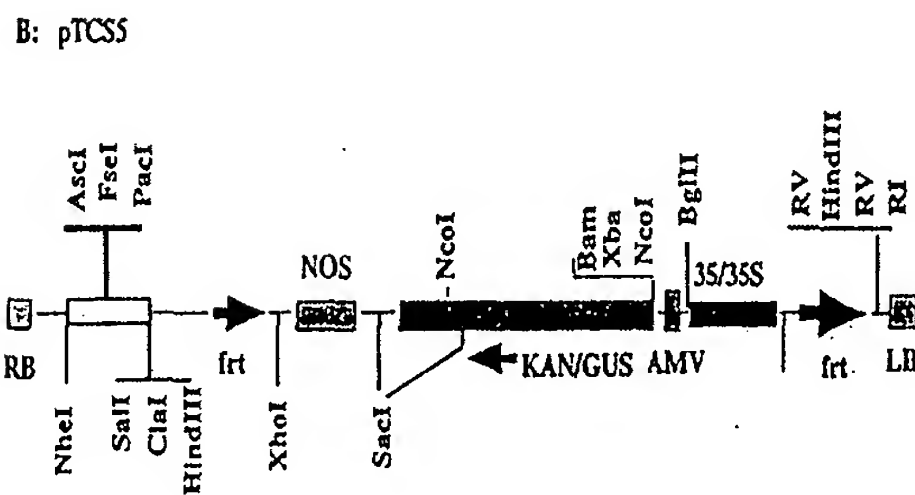
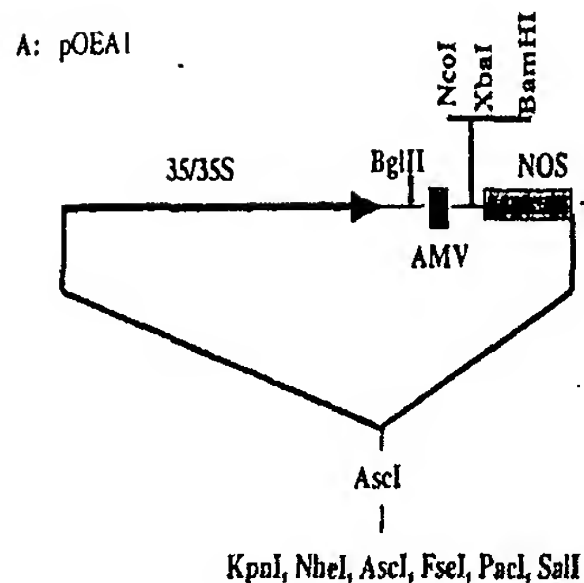
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Figure 2



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Figure 3



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